

For Comments Only

BUREAU OF INDIAN STANDARDS

DRAFT FOR COMMENTS ONLY

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भारतीय मानक मसौदा

**अंतरिक्ष प्रणालियाँ — मिशन के बाद सफल निपटान सुनिश्चित करने के लिए
अंतरिक्ष मलबे और उल्कापिंड प्रभावों के खिलाफ मानवरहित अंतरिक्ष
यान की उत्तरजीविता का आकलन**

Draft Indian Standard

**Space Systems — Assessment of Survivability of Unmanned Spacecraft Against Space
Debris and Meteoroid Impacts to Ensure Successful
Post-Mission Disposal**

ICS: 49.140

**Air and Space Vehicles Sectional Committee, TED 14 Last date for receipt of comments is
28/08/2024**

NATIONAL FOREWORD

(Identical Clause to be added later)

The text of ISO standard has been proposed as suitable for publication as an Indian Standard without deviations. Certain terminologies and conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'.
- Comma (,) has been used as a decimal marker, while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standard for which Indian Standard also exist. The corresponding Indian Standard, which is to be substituted in its respective place, is listed below along with its degree of equivalence for the edition indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 10795 : 2011 Space systems — Programme management and quality — Vocabulary	IS 18338 : 2023/ ISO 10795: 2019 Space systems — Programme management and quality — Vocabulary	Identical under dual numbering

Attention is drawn to the possibility that some of the elements of this standard may be the subject of patent rights. The Bureau of Indian Standards shall not be held responsible for identifying any or all such patent rights.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

SCOPE

This International Standard defines requirements and a procedure for assessing the survivability of an unmanned spacecraft against space debris and meteoroid impacts to ensure the survival of critical components required to perform post-mission disposal. This International Standard also describes two impact risk analysis procedures that can be used to satisfy the requirements.

This International Standard is part of a set of International Standards that collectively aim to reduce the growth of space debris by ensuring that spacecraft are designed, operated, and disposed of in a manner that prevents them from generating debris throughout their orbital lifetime. All of the primary debris mitigation requirements are contained in a top-level International Standard. The remaining International Standards, of which this is one, provide methods and processes to enable compliance with the primary requirements.

FOR COMPLETE TEXT OF THE DOCUMENT KINDLY REFER ISO 16126: 2014 or CONTACT:

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